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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/087,917	03/05/2002	Emilio Castano Graff	12,354	6046

7590

06/17/2003

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EXAMINER

HOPKINS, ROBERT A

ART UNIT

PAPER NUMBER

1724

DATE MAILED: 06/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/087,917

Applicant(s)

Crash et al

Examiner

Robert A Hopkins

Art Unit

1724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 5-22-03.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) 5-27, 32, and 37-39, 40 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5-27, 32, and 37-39, 40 is/are allowed.
- 6) ☒ Claim(s) 1-4, 28-31, 33-36, 41 is/are rejected.
- 7) ☐ Claim(s) is/are objected to.
- 8) ☐ Claim(s) are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. .
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s)
- 4) ☐ Interview Summary (PTO-413) Paper No(s)
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 112

Claims 33 and 34 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. A step for separating a liquid from a gas is critical or essential to the practice of the invention, but not included in the claim is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). Examiner notes claim 33 recites "a centrifugal means to process said gas thereby to separate heavy gases from light gases", however, such a centrifugal means is in series with a centrifugal separator for separating liquid from a saturated gas, wherein such a series of centrifugal means is clearly shown in figure 6 of the current invention. Examiner notes that therefore a step of including a centrifugal means to separate a liquid from a saturated gas is missing in claim 33. Examiner also notes that inclusion of a step in claim 33 would provide for identical claim limitations as claim 29, and hence would lead to a possible double patenting situation. Correction is requested. Claim 34 depends on claim 33 and hence is also rejected..

Claims 1-4,28-31,35,36, and 41 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites "and pass a flowing stream of liquid associated with said gases". Examiner notes that the claim is directed towards a gas centrifuge, wherein the gas centrifuge only separates gases. Therefore, examiner believes that the above limitations should be deleted from the claim, because the gas

centrifuge does not pass liquid through with the gases. Examiner suggests substituting -- and pass said gases-- for the above limitations to correct the claim scope. Claim 3 depends on claim 1 and hence is also rejected.

Claim 2 recites “, and means to inject a treatment fluid into said system for purposes of gas treatment”. Examiner notes that the claim is directed towards a gas centrifuge, wherein the gas centrifuge only separates gases. Examiner notes that the embodiment of figure 6 includes a means to inject a treatment fluid , however the means to inject a treatment fluid is only associated with a gas/liquid separator, and not a gas centrifuge. Examiner notes that injecting a liquid into a gas centrifuge would also seem to decrease the separation efficiency of the gas centrifuge. Claim 4 depends on claim 2 and hence is also rejected.

Claim 28 recites “and pass a flowing fluid stream , associated with said mixture. Examiner notes that the claim is directed towards a gas centrifuge, wherein the gas centrifuge only separates gases. Therefore, examiner believes that the above limitations should be deleted from the claim, because the gas centrifuge does not pass a fluid stream through with the mixture. Examiner suggests substituting -- and pass said mixture of gases-- for the above limitations to correct the claim scope.

Claim 29 recites “and pass a flowing fluid stream” Examiner notes that vanes are only associated with a centrifugal separator for separating liquids and gases, or a gas centrifuge, and not a three phase separator of lines 3-5. Therefore, examiner suggests substituting -- and pass a mixture of gases or a

gas/liquid mixture-- for the above limitations to correct the claim scope.

Claim 29 recites three "centrifugal means" in parts a,b, and c, however only the "centrifugal means" in parts b and c have vanes associated with the structures, as noted in figure 6 of the current drawings. The centrifugal means in part a is a conventional three phase separator, and the specification nor the drawings give support for vanes associated with the three phase separator. Therefore, examiner suggests inserting --first-- in line 3 before centrifugal, --second-- in line 6 before centrifugal, --third-- in line 10 before centrifugal, and --second or third-- in line 14 before centrifugal, wherein the above suggested amendments clearly indicate that only the gas/liquid separator and gas centrifuge have vanes associated with them, as shown in figure 6 of the current drawings. Claim 30 depends on claim 29 and hence is also rejected

Claim 31 recites "centrifugal means" in parts a and b however only the "centrifugal means" in part b has vanes associated with the structures, as noted in figure 6 of the current drawings. The centrifugal means in part a is a conventional three phase separator, and the specification nor the drawings give support for vanes associated with the three phase separator. Therefore, examiner suggests inserting --first-- in line 3 before centrifugal, --second-- in line 6 before centrifugal, and --second-- in line 11 before centrifugal, wherein the above suggested amendments clearly indicate that only the gas/liquid separator has vanes associated with them, as shown in figure 6 of the current drawings.

Claim 33 recites "centrifugal means" in parts a and b however only the

"centrifugal means" in part b has vanes associated with the structures, as noted in figure 6 of the current drawings. The centrifugal means in part a is a conventional three phase separator, and the specification nor the drawings give support for vanes associated with the three phase separator. Therefore, examiner suggests inserting --first-- in line 3 before centrifugal, --second-- in line 6 before centrifugal, and substitute --first centrifugal means-- for "system in line 10, wherein the above suggested amendments clearly indicate that only the gas/liquid separator has a means to inject a treatment liquid, as shown in figure 6 of the current drawings.

Claim 35 recites "means to inject a treatment liquid into said system for purposes of gas treatment". Examiner notes that the treatment liquid is only injected into the "centrifugal means" and not into the "system", therefore such a change should be made in line 7 of the claim.

Claim 35 recites "and pass a flowing stream of said liquid". Examiner notes that only the gas/liquid mixture passed into the centrifugal means of part a is received by the vanes. Therefore examiner suggests substituting --said gas/liquid mixture-- for "a flowing stream of said liquid" to correct the scope of the claim.

Claim 36 recites "and there being means to inject a treatment fluid to flow into the centrifuge means for purposes of fluid treatment". Examiner notes that the claim is directed towards a gas centrifuge, wherein the gas centrifuge only separates gases. Examiner notes that the embodiment of figure 6 includes a means to inject a treatment fluid , however the means to inject a treatment fluid

is only associated with a gas/liquid separator, and not a gas centrifuge.

Examiner notes that injecting a liquid into a gas centrifuge would also seem to decrease the separation efficiency of the gas centrifuge.

Claim 41 recites "and pass a flowing stream associated with said fluid mixture". Examiner notes that the claim is dependant on claim 26, wherein claim 26 is directed towards a gas centrifuge, wherein the gas centrifuge only separates gases. Therefore, examiner believes that claim 41 should be deleted, because the gas centrifuge does not pass a fluid stream through with the mixture.

Allowable Subject Matter

Claims 5-27 , 32, and 37-39 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

Claims 5-25 were indicated as allowable for the reasons stated in the office action dated 3-27-03.

Claims 37-39 were amended to overcome a 112 first paragraph rejection in the office action dated 3-27-03, and therefore are allowable because claims 37-39 are dependant on claim 5.

Claim 26 was amended to include the limitations, "and also providing a rotary centrifuge", and therefore overcomes the German reference and Ruhemann et al because neither reference teaches separation of carbon dioxide and methane. Claim 27 depends on claim 26 and hence is also allowed.

Claim 32 recites "and means to inject a treatment liquid into said system for purposes of gas processing". Neither German reference nor Ruhemann disclose a gas/liquid centrifugal means, a gas centrifuge, and a means to inject a treatment liquid into said system for purposes of gas processing. It would not have been obvious to provide a means to inject a treatment liquid into the system of German reference or Ruhemann et al because neither German reference nor Ruhemann et al suggest such a modification.

Double Patenting

A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

Applicant is advised that should claim 32 be found allowable, claim 34 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Applicant's amendment necessitated the new grounds of rejection

presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.**

See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

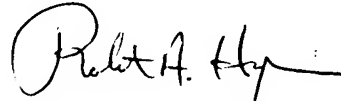
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert A Hopkins whose telephone number is 703-308-3913. The examiner can normally be reached on Monday-Friday 9:00am-3:00pm, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on 703-308-3318. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9572 for After Final communications.

Application Number : 10/087,917
Art Unit : 1724

Any inquiry of a general nature or relating to the status of this application
or proceeding should be directed to the receptionist whose telephone number is
703-308-0661.



Robert A Hopkins
Primary Examiner
Art Unit 1724

rah
April 4, 2003